

Remarks

The Examiner's reminder regarding the proper language and format for an abstract of the disclosure is acknowledged with appreciation. Applicant shall endeavor to comply with the requirements of such abstracts as indicated.

With regard to the Examiner's rejection of the drawings, a replacement sheet of drawings is submitted herewith containing Figures 6 through 8 and adding a new Figure 6a. Figure 7 has been amended to denote the set of wheels of the moldboard by the reference numeral 94. New Figure 6a illustrates a modification of the structure shown in Figure 6 and provides for the adjustability of the moldboard. Corresponding to the amendment of Figure 7 and the addition of Figure 6a, page 3 of the specification has been amended to describe newly submitted Figure 6a, page 8, the last full sentence has been amended to identify the set of wheels with the reference numeral 94 and page 9, the first full paragraph which describes the modification shown in newly submitted Figure 6a has been amended to identify the radial arm section, the slot and the bolt of the arrangement with appropriate reference numerals.

In view of the aforementioned amendments, it is submitted that the Examiner's objection to the specification and drawings is appropriately overcome. Upon notification of allowable subject matter, formal drawings will be submitted.

Reconsideration of the claims as originally submitted, respectfully is requested in view of the following additional remarks.

Claims 1 through 7 and 20 through 31 have been rejected as being anticipated by U.S. Patent No. 501,515 to Johnson. It is submitted that such reference does not disclose each and every element of Applicant's claims. The Johnson Patent essentially illustrates and describes a street sweeping apparatus intended to be towed by a drawbar, which includes a frame mounted

on a set of wheels, a conveyor O supported on the frame, which extends from a lower rear position to an upper forward position, a dust pan Q disposed below the lower end of the conveyor, a transversely disposed conveyor supported on the frame of the apparatus adjacent the upper end of the conveyor and a rotary brush I. It is intended to operate in a manner whereby the rotary brush sweeps dirt onto the forwardly disposed dust pan, certain buckets O' provided on the conveyor belt scoop up the dirt deposited on the dust pan and carry it upwardly and forwardly, discharging it onto the transversely disposed conveyor, and the transversely disposed conveyor conveys the dirt onto a receptacle presumably disposed on the side of the apparatus. Conveyor O of Johnson is not provided with means for gathering articles deposited on the ground as recited in the rejected claims but merely scoops up dirt deposited on dust pan Q by rotary brush I which is the device used for gathering particles from the ground. Endless conveyor O of Johnson does not extend from a front end upwardly and rearwardly to an elevated rear end as recited in the rejected claims. Considering the manner in which the Johnson sweeper is towed, conveyor O extends from a rear end upwardly and forwardly to an elevated front end. In the Johnson structure, there is no receptacle for receiving debris transported by an endless conveyor. In lieu thereof, articles carried by conveyor O of Johnson are deposited onto another conveyor, not a receptacle. There is no moldboard provided in Johnson forwardly of a lower end of the conveyor. Instead, there is provided a dust pan Q on which dirt is brushed onto by a rotary brush, which is scooped up by buckets mounted on conveyor O. Dust pan Q of Johnson is intended to receive dirt to be scooped up by the buckets of conveyor O whereas in the claimed structure the moldboard does not receive debris which then is scooped up by the conveyor.

The construction and function of the moldboard of the claimed invention is entirely different from the construction and function of dust pan Q of the Johnson sweeper. Moldboard

23 of the claimed invention engages the ground and negotiates different terrain to permit the movable tines 46 that are aft of the moldboard to penetrate the ground and impale debris. Dust pan Q of Johnson merely functions to receive dirt brush onto it by the rotary brush, to be scooped up by the buckets provided on conveyor O. The Johnson apparatus further functions in the manner of sweeping dirt off of streets whereas the claimed invention is intended to remove debris strewn on soft ground.

In addition to the above, it is submitted that the Johnson reference neither discloses nor teaches an apparatus having a moldboard provided with ground engaging wheels as recited in rejected claims 5, 23, 24, 28 and 29 or a moldboard having a ground engageable end and a counter weight end as recited in claims in 6 and 30.

Claims 8 and 9 have rejected as being unpatentable over Johnson in view of European Patent No. 319420 A2 to Claude on the rationale that it would be obvious from the teachings of the Claude Patent to provide a perforated or chain link material in the conveyor O of the Johnson apparatus to arrive at the structure recited in such claims. Initially, in response to such grounds of rejection, it is to be noted as indicated above that Johnson fails to disclose the basic structure recited in Applicant's claims. Furthermore, assuming that Johnson disclosed the basic arrangement of the claimed structure, it would not be obvious to modify the Johnson structure as purportedly taught by Claude to arrive at the claimed combination because such a modification of the Johnson structure would be destructive of the intended function of Johnson. Conveyor Q in the Johnson structure is intended to transport dirt swept up by the rotary brush I, upwardly and forwardly into a transversely disposed conveyor. Since conveyor O is intended to transport dirt, certainly one would not elect to provide such a conveyor with an endless, perforated or chain

link material through which dirt obviously would fall through onto the surface sought to be swept.

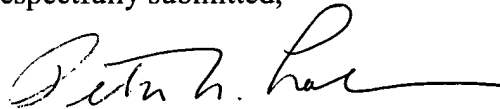
Claims 10 through 19 have been rejected as being unpatentable over Johnson in view of U.S. Patent No. 4,287,707 to Persoons et al which purports to disclose an apparatus having a bin into which articles are deposited, tines on a conveyor and cooperating tines or a brush supported on the frame. In this regard, it has been asserted that it would be obvious to a person having ordinary skill in the art to provide the conveyor and means for receiving the articles of Johnson with the aforementioned purported features of Persoons et al to arrive at the structure recited in such claims. Again, initially, it is submitted that Johnson essentially fails to disclose the basic structure of Applicant's claims. Furthermore, it is submitted that Persoons et al fails to teach the use of tines mounted on an endless conveyor which function to impale debris strewn on the ground, transport such impaled debris upwardly and rearwardly to the vicinity of a bin and cooperate with tines mounted on the support frame of the apparatus for combing out such impaled debris from the conveyor tines and allow them to be deposited into the bin. What is construed as tines on a conveyor for picking up debris strewn on the ground and cooperating with tines mounted on the support frame of the apparatus in Persoons et al is nothing more than cooperating flaps intended to confine a stream of air directed across beans entangled with leaves and other debris removed from the ground for the purpose of separating the leaves and other debris from the beans.

The Persoons et al apparatus is a bean harvesting apparatus which includes a rotary drum 10 for gathering bean plants from the ground and depositing them on a conveyor 12, a conveyor 9 which receives bean plants including leaves and other debris from conveyor 12 and transports them laterally, a conveyor 18 which transport the bean plants, leaves and other debris upwardly

and rearwardly and deposits them on a fourth conveyor 24 which then conveys the beans presumably separated from any leaves or other debris upwardly and deposits them in a bin 26. Mounted on such apparatus is a set of fans 31 which presumably direct the stream of air across transversely disposed conveyor 9 for the purpose of separating the leaves and other debris from the beans deposited on conveyor 9. The various arrangements illustrated in Figures 2a through 2h are merely different types of arrangements of confining the flow of such stream of air along the length of conveyor 9. The various engaging components are not cooperating tines but merely cooperating flaps for confining such stream of air. Further with respect to the rejection of such claims, it is submitted that such modification of Johnson as purportedly taught by Persoons et al fails to provide for removable bins supported on the frame as recited in claims 13, 14 and 15 or a rotary brush supported on the frame and cooperating with a conveyor as recited in claims 16 through 19.

In view of the foregoing, it respectfully is requested that the rejection of claims 1 through 31 be withdrawn, such claims be allowed and that the application be passed to issue.

Respectfully submitted,



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